



Mr. Kevin Bilash
USEPA Region III
Land, Chemicals & Redevelopment Division 3LD20
1650 Arch Street
Philadelphia, PA 19103

August 31, 2022
File No. 4862.04

Re: Marcus Hook Industrial Complex
Monthly Progress Report – August 2022
Area of Interest 7
Marcus Hook, PA

Dear Mr. Bilash:

This monthly progress report is being submitted on behalf of the Evergreen Resource Management Operations (Evergreen) for Area of Interest (AOI) 7 at the Marcus Hook Industrial Complex (MHIC) in Marcus Hook, Pennsylvania. On December 9, 2021, a Revised Interim Measures (IM) Workplan was submitted to the United States Environmental Protection Agency (USEPA) to address arsenic in the subsurface at AOI 7. The IM Workplan was approved by the USEPA on February 15, 2022. The discussion below provides an update on IM pre-design investigation (PDI) activities and Bench Scale Treatability Study activities.

Activities completed this reporting period

No field activities were completed during this reporting period (August 2022). The activities which were completed include the Bench Scale Treatability Study activities that occurred in the treatability lab at Terra Systems, Inc. (Terra Systems) in Claymont, Delaware. Details for these activities are presented below. Note that the results of the treatability testing will be submitted in a future progress report once the Bench Scale Treatability Study is completed.

- Treatability study samples from the reagent screening tests for the following soil/well pairs were sent to SGS North America Inc. in Dayton, NJ for analysis of dissolved arsenic (aqueous) verification:
 - MW-560D soil and MW-560D groundwater
 - MW-608D soil and MW-606S groundwater

Activities planned for the next reporting period

The activities planned for the next reporting period (September 2022) include continuing the Bench Scale Treatability Study activities, as described in the Revised IM Workplan.

Deviation from approved activities this reporting period

There were no deviations from the approved activities for this reporting period.



Deviation from approved schedule

There were no schedule deviations during this period.

A conference call with the USEPA and Evergreen was held on August 5, 2022, during which the USEPA shared the results of the Army Corps of Engineers (USACE) review of Evergreen's 2022 Sediment and Porewater Sampling Letter Report submitted on May 27, 2022. The USACE review determined that Evergreen's sediment and porewater sampling methodology results were valid. The USEPA also reported that the USACE determined that the results from the USACE 2018 porewater sampling event were valid. A follow up conference call with the USEPA and Evergreen on August 15, 2022 discussed next steps for the IM work. As discussed in this meeting, Evergreen is going to suspend the pilot test and provide a Porewater Sampling Plan as an attachment to the next monthly report (September 2022) to conduct confirmatory porewater sampling at specific locations. The suspension of the pilot test will also put the IM performance monitoring proposed in the IM Workplan on pause because that work is dependent on the pilot testing.

The schedule for the major milestones is provided below and the detailed schedule is included in Attachment A. The items in bold are revised from the last progress report and are also modified in the schedule in Attachment A.

Task	Schedule
PDI Activities	3/2022 – 5/2022
Bench Scale Treatability Testing	5/2022 – 10/2022
Additional Porewater Sampling	10/2022
Pilot Testing	On pause
IM Performance Monitoring	On pause

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.



Colleen Costello, PG
Senior Vice President

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Attachments

Attachment A – Interim Measures Implementation Schedule

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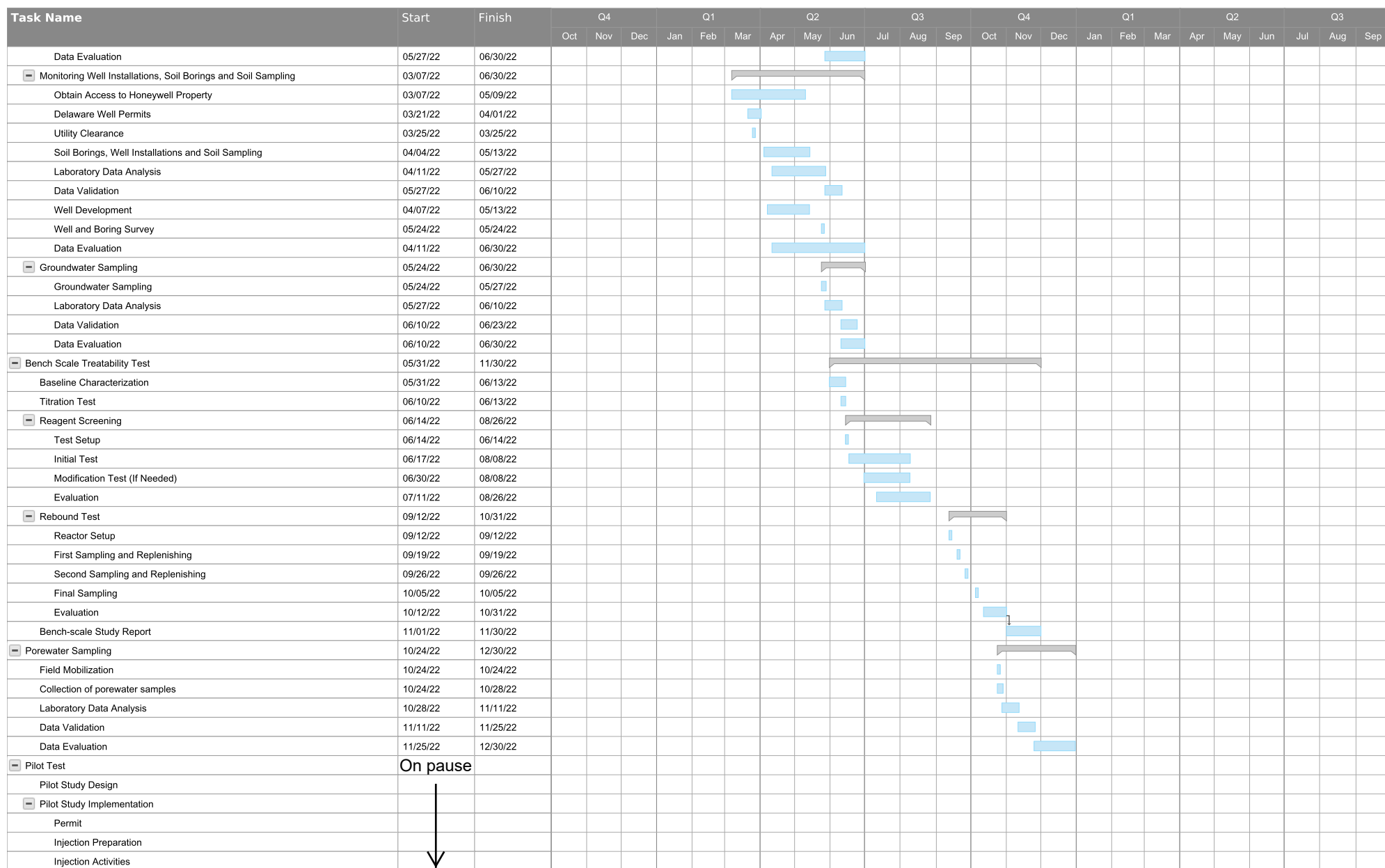
Attachment A

Updated Interim Measure Implementation Schedule

Evergreen

Marcus Hook, Pennsylvania

Task Name	Start	Finish	Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3		
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Submit IM Workplan to EPA	12/09/21	12/09/21			<div><div></div></div>																					
EPA Approval of IM Workplan	12/10/21	02/15/22			<div><div></div></div>																					
<div>Monthly Report to EPA</div>	01/31/22	08/31/23																								
January 2022 Monthly Report	01/31/22	01/31/22				<div><div></div></div>																				
February 2022 Monthly Report	02/28/22	02/28/22					<div><div></div></div>																			
March 2022 Monthly Report	03/31/22	03/31/22						<div><div></div></div>																		
April 2022 Monthly Report	04/29/22	04/29/22							<div><div></div></div>																	
May 2022 Monthly Report	05/31/22	05/31/22								<div><div></div></div>																
June 2022 Monthly Report	06/30/22	06/30/22									<div><div></div></div>															
July 2022 Monthly Report	07/29/22	07/29/22										<div><div></div></div>														
August 2022 Monthly Report	08/31/22	08/31/22											<div><div></div></div>													
September 2022 Monthly Report	09/30/22	09/30/22												<div><div></div></div>												
October 2022 Monthly Report	10/31/22	10/31/22													<div><div></div></div>											
November 2022 Monthly Report	11/30/22	11/30/22														<div><div></div></div>										
December 2022 Monthly Report	12/30/22	12/30/22															<div><div></div></div>									
January 2023 Monthly Report	01/31/23	01/31/23																<div><div></div></div>								
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August 2023 Monthly Report	08/31/23	08/31/23																							<div><div></div></div>	
<div>PDI</div>	03/07/22	06/30/22																								
PDI Mobilization	03/22/22	05/31/22																								
<div>Sediment and Porewater Sampling</div>	03/22/22	05/31/22																								
Field Mobilization	03/22/22	03/22/22																								
Collection of sediment samples and grab porewater samples	03/22/22	03/25/22																								
Collection of DGT porewater samples	03/22/22	03/23/22																								
Laboratory Data Analysis	03/28/22	04/29/22																								
Data Validation	04/26/22	05/10/22																								
Data Evaluation	04/18/22	05/31/22																								
<div>GW Elevation and GW Flow Evaluation</div>	03/25/22	06/30/22																								
Installation of Transducers	04/08/22	04/08/22																								
Deployment of Groundwater Flow Meter	05/24/22	05/24/22																								
Install stilling well	03/25/22	03/25/22																								
Data Collection	04/08/22	05/27/22																								



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